

PM SHRI KENDRIYA VIDYALAYA NO.1 SAMBALPUR

HOLIDAY HOMEWORK FOR AUTUMN BREAK-(2026-27)

CLASS-IX

ALL SUBJECTS AND PROJECTS

(Autumn Break Homework 2026-27)

Subject : English

Class – IX

(NOTE- ALL THE HOMEWORK MUST BE DONE IN BOTH THE SIDE OF A4 SIZE PAPER OR A THIN COPY)

GENERAL INSTRUCTIONS

1. Follow the prescribed CBSE format for all writing tasks.
2. Use your own ideas and imagination. Avoid copying content directly from the internet.
3. Revise the chapters and grammar topics taught in class.
4. Submit the completed holiday homework on the first working day after the Autumn Break.

SECTION A: CREATIVE WRITING

Q1. Diary Entry (100–120 words)

Imagine that you participated in a school event where you helped someone in need. Write a diary entry describing the experience, your feelings, and the lesson you learnt from it.

OR

Write a diary entry describing a memorable day during your Autumn Break.

Q2. Article Writing (120–150 words)

Write an article on “The Importance of Sports and Physical Fitness in Students’ Lives.”

Include the following points:

- Physical and mental well-being
- Discipline and teamwork
- Development of leadership skills
- Importance of balancing studies and sports
- Suggestions for encouraging students to participate in sports

Give your article a suitable title and follow the correct format.

Q3. Notice Writing

You are the Sports Captain of your school. Draft a notice in about 50 words informing students of Classes IX and X about an upcoming Inter-House Sports Competition. Include the date, venue, events, registration details, and the name/designation of the issuing authority.

Follow the proper CBSE notice-writing format.

SECTION B: GRAMMAR

Q4. Reported Speech

Rewrite the following sentences in reported speech.

- a) Riya said, “I am preparing for my English examination.”
- b) Rahul said to me, “I have completed my homework.”
- c) The teacher said to Rohan, “Have you submitted your assignment?”
- d) Mother said to me, “Why are you wasting your time?”
- e) The teacher said to the students, “Maintain silence in the classroom.”
- f) She said to me, “Please help me carry these books.”
- g) Father said to me, “Do not waste your time.”

- h) Neha said, "What a beautiful painting this is!"
- i) The old man said, "May God bless you!"
- j) The doctor said to the patient, "Take your medicines regularly and exercise daily."

SECTION C: TEXTBOOK AND PORTFOLIO WORK

Q5. Complete Your English Portfolio

Complete the English portfolio already assigned to you, if it has not yet been submitted.

- Ensure that all assigned activities and tasks are complete.
- Arrange the work in the prescribed order.
- Check presentation, accuracy, and neatness.
- Submit the portfolio as per your teacher's instructions.

Q6. Complete Pending Classwork and Homework

- Complete all pending English classwork and homework.
- Complete unfinished notebook exercises and written assignments.
- Ensure that all notebook work is properly dated and organised.

SECTION D: ART-INTEGRATED AND CREATIVE LEARNING

Q7. Create an Infographic on Any Sport

Choose any one sport of your choice, such as cricket, football, hockey, badminton, basketball, volleyball, athletics, or any traditional Indian sport. Create an attractive, informative, and well-organised infographic on A4 sheets.

Your infographic must include the following information:

- ◆ Name of the Sport: Mention the name and provide a suitable heading.
- ◆ Introduction: Briefly introduce the sport and explain its popularity or significance.
- ◆ Objective of the Game: Explain what players aim to achieve.
- ◆ How to Play: Describe the basic steps involved in playing the sport.
- ◆ Rules and Regulations: Mention at least five important rules.
- ◆ Equipment Required: Illustrate or list the equipment needed.
- ◆ Number of Players: Mention the number of players on each team or the number of participants, as applicable.
- ◆ Playing Area: Draw or paste a labelled diagram of the playing field or court, wherever applicable.
- ◆ Skills Required: Mention important skills such as coordination, speed, stamina, strategy, and teamwork.
- ◆ Health Benefits: Explain how the sport contributes to physical and mental fitness.
- ◆ Famous Players: Mention the names of at least two well-known players associated with the sport.
- ◆ Sportsmanship: Write a short slogan or message promoting fair play, discipline, and respect for opponents.

Presentation Guidelines

- Use headings, short descriptions, illustrations, symbols, and labelled diagrams.
- Maintain a proper balance between text and visuals.
- Ensure that the information is accurate and easy to understand.
- Use colours creatively without overcrowding the page.
- Mention your name, class, and section at the bottom of the infographic.

Suggested Slogan: "Play Fair, Stay Fit, and Never Quit!"

Q.8.Contribution to the School Magazine (A4-size paper)

Write ONE original creative piece for the school magazine. Choose any ONE of the following:

☐A creative article/A poem/A travelogue/ A short story/A personal reflection or inspiring experience

Give your piece an interesting title. Write in your own words, check spelling and punctuation, and present it neatly on an A4-size sheet. Add your name, class, and section. Drawings or small illustrations may be added

ववषय: – संस्कृतम्

NO.01 न गङ्गदत्तः पूनरेति कूपम् । (षष्ठ पाठः) (लेखनम्)

NO.02 संस्कृतमासानां नामानि लिखत ।

NO.03 संस्कृत-संख्या: ०१ तः १०० पर्यन्तम् लेखनम् ।

NO. 04 फलानां नामानि लिखत ।

शरदकालीन अवकाश गृहकार्य (2026-27)

1. दो मित्रों के बीच शरदकालीन अवकाश की योजना पर संवाद लिखिए।
2. विद्यालय पत्रिका हेतु एक स्वरचित रचना A4 साइज पेपर में लिखिए।
3. अपने विद्यालय में खेल सामग्री के कमी के संबंध में प्राचार्य महोदय को प्रार्थना पत्र लिखिए।
4. अपने मित्र को शरदकालीन अवकाश में बिताए गए समय का वर्णन करते हुए पत्र लिखिए।
5. अनुच्छेद लेखन लगभग 150 शब्दों में : (क) चैट जीपीटी :शिक्षा में उपयोगी साधन :- बिन्दु - परिचय , विद्यार्थियों के लिए उपयोगिता , लाभ एवं सीमाएँ , उचित एवं जिम्मेदार उपयोग , निष्कर्ष

(ख) सामाजिक मीडिया का प्रभाव :- बिन्दु – सामाजिक मीडिया का अर्थ, सकारात्मक और नकारात्मक प्रभाव, सावधानियाँ , निष्कर्ष

(ग) शरदकालीन अवकाश :अनुभव और सीख :- बिन्दु : अवकाश की शुरुआत, छुट्टियों में किए गए कार्य, परिवार के साथ बिताया समय, रचनात्मक कार्य का अनुभव, छुट्टियों में मिली सीख, निष्कर्ष

6.परियोजना कार्य :- इन विषयों के दस-दस उदाहरण देकर A4 साइज पेपर में 4-5 पृष्ठ का एक परियोजना तैयार करें - **उपसर्ग , प्रत्यय , समास , शब्दालंकार , अर्थ के आधार पर वाक्य भेद , संज्ञा, सर्वनाम , विशेषण और क्रिया ।**

नोट:- सभी समय पर कार्य पूरा करें।

Holiday Homework (Class-IX) MATHS

(Solve the following practice set)

PRACTICE SET – MATHEMATICS (2026–27)

General Instructions

1. This question paper contains 38 questions, all of which are compulsory. It is divided into five sections: A, B, C, D and E.
 2. Section A has 20 multiple-choice questions of 1 mark each (Q.19 and Q.20 are Assertion–Reason questions).
 3. Section B has 5 very short answer questions of 2 marks each.
 4. Section C has 6 short answer questions of 3 marks each.
 5. Section D has 4 long answer questions of 5 marks each.
 6. Section E has 3 case-based questions of 4 marks each.
 7. Show all steps of working. Draw neat, labelled figures wherever required. Use of calculators is not permitted.
- Questions 1 to 18 are multiple-choice questions. Questions 19 and 20 are Assertion–Reason questions: choose the correct option from (a), (b), (c) and (d).*

1. If the point $P(a, b)$ satisfies $ab < 0$ and $a - b > 0$, then P lies in [1]
(a) Quadrant I (b) Quadrant II
(c) Quadrant III (d) Quadrant IV
2. Three vertices of a rectangle are $(-3, -2)$, $(5, -2)$ and $(5, 4)$. The fourth vertex lies in [1]
(a) Quadrant I (b) Quadrant II
(c) Quadrant III (d) Quadrant IV
3. The point $(3, 4)$ is reflected in the y -axis and the image is then reflected in the x -axis. [1]
The final image is
(a) $(-3, 4)$ (b) $(3, -4)$
(c) $(-3, -4)$ (d) $(4, 3)$
4. If $p(x) = ax + b$ with $p(1) = 5$ and $p(-1) = 1$, then $p(3)$ equals [1]
(a) 7 (b) 8
(c) 9 (d) 11
5. The zero of the linear polynomial whose graph passes through $(0, -3)$ and $(2, 5)$ is [1]
(a) $3/4$ (b) $4/3$
(c) $-3/4$ (d) $3/2$
6. The area (in square units) of the triangle formed by the graph of $y = 2x - 6$ and the [1]
coordinate axes is
(a) 6 (b) 12
(c) 18 (d) 9
7. Which of the following is a rational number? [1]
(a) $(3 + \sqrt{5})^2$ (b) $(\sqrt{7} + \sqrt{2})(\sqrt{7} - \sqrt{2})$
(c) $\sqrt{2} + \sqrt{8}$ (d) $1/\sqrt{3}$

8. If $4^x = 8^{x-1}$, then x equals [1]
(a) 2 (b) 4
(c) 3 (d) 5
9. The value of $1/(\sqrt{2} + 1) + 1/(\sqrt{3} + \sqrt{2}) + 1/(2 + \sqrt{3})$ is [1]
(a) 2 (b) 1
(c) $\sqrt{3} - 1$ (d) 0
10. The number 0.363636... (the digits 36 repeating) in the form p/q , in lowest terms, is [1]
(a) $4/11$ (b) $36/100$
(c) $3/11$ (d) $9/25$
11. If $x^2 + 1/x^2 = 14$ and $x > 0$, then $x + 1/x$ equals [1]
(a) $2\sqrt{3}$ (b) 4
(c) 16 (d) 2
12. If $(x + a)(x + b) = x^2 + 7x + 12$, then $a^2 + b^2$ equals [1]
(a) 7 (b) 13
(c) 25 (d) 49
13. The value of $999^2 - 1$ is [1]
(a) 998000 (b) 999000
(c) 990000 (d) 998001
14. If $x - y = 2$ and $x^2 - y^2 = 10$, then $x^2 + y^2$ equals [1]
(a) 13 (b) 17
(c) 29 (d) $29/2$
15. AB is a chord of a circle with centre O and $\angle AOB = 100^\circ$. If C is a point on the major arc, then $\angle ACB$ equals [1]
(a) 100° (b) 50°
(c) 130° (d) 200°
16. In a cyclic quadrilateral ABCD, $\angle A = (3x + 5)^\circ$ and $\angle C = (2x - 15)^\circ$. The measure of $\angle A$ is [1]
(a) 61° (b) 109°
(c) 119° (d) 71°
17. Two parallel chords of lengths 8 cm and 6 cm lie on opposite sides of the centre of a circle of radius 5 cm. The distance between them is [1]
(a) 1 cm (b) 7 cm
(c) 14 cm (d) 5 cm
18. An isosceles triangle has perimeter 32 cm and each equal side is 12 cm. Its area is [1]
(a) $16\sqrt{2} \text{ cm}^2$ (b) $64\sqrt{2} \text{ cm}^2$
(c) $48\sqrt{2} \text{ cm}^2$ (d) $32\sqrt{2} \text{ cm}^2$

19. **Assertion (A):** The product of two irrational numbers is always irrational. [1]

Reason (R): $\sqrt{2} \times \sqrt{2} = 2$.

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

20. **Assertion (A):** The point $(-5, 0)$ does not lie in any quadrant. [1]

Reason (R): A point which lies on a coordinate axis does not belong to any quadrant.

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are true but R is not the correct explanation of A.
- (c) A is true but R is false.
- (d) A is false but R is true.

SECTION B – Very Short Answer Questions (2 marks each)

21. $P(-2, 1)$, $Q(3, 1)$ and $R(5, 4)$ are three vertices of a parallelogram PQRS. Find the coordinates of S and the area of the parallelogram. [2]

22. A linear polynomial $p(x) = ax + b$ satisfies $p(2) = 7$ and $p(-1) = -2$. Find $p(x)$ and its zero. [2]

23. Simplify: $(3^{n+2} - 3^n) \div 3^{n-1}$. [2]

24. Using a suitable identity, evaluate $(8.7)^2 - (1.3)^2$. [2]

25. A rhombus has a side of 13 cm and one diagonal of 10 cm. Using Heron's formula, find its area. [2]

SECTION C – Short Answer Questions (3 marks each)

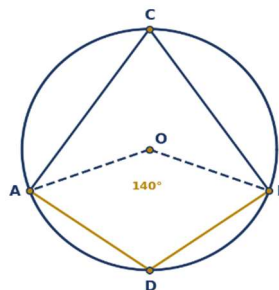
26. Plot the points $A(1, 2)$, $B(4, 2)$ and $C(4, 6)$ on a graph paper. Show that $\triangle ABC$ is right-angled at B, and find the length of AC and the perimeter of the triangle. [3]

27. Plan A of a mobile service charges ₹ 40 plus ₹ 8 per unit. Plan B charges ₹ 100 plus ₹ 5 per unit. Write the linear polynomial for each plan, find the number of units for which both plans cost the same, and state which plan is cheaper for 30 units. [3]

28. Find the values of a and b if $(\sqrt{3} - 1)/(\sqrt{3} + 1) = a + b\sqrt{3}$. [3]

29. If $a + b = 10$ and $a^2 + b^2 = 58$, find ab and $(a - b)^2$. [3]

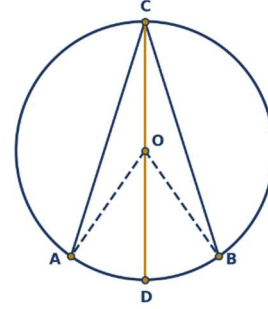
30. In the figure, O is the centre of the circle and $\angle AOB = 140^\circ$. C is a point on the major arc and D is a point on the minor arc AB. Find $\angle ACB$ and $\angle ADB$. [3]



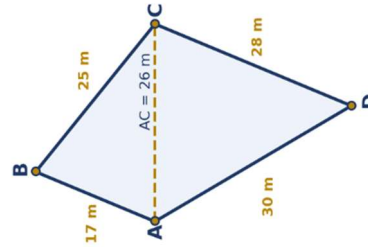
31. The sides of a triangular plot are in the ratio $3 : 5 : 7$ and its perimeter is 300 m. Using Heron's formula, find its area. (Use $\sqrt{3} = 1.73$) [3]

SECTION D – Long Answer Questions (5 marks each)

32. If $x > 0$ and $x^2 + 1/x^2 = 34$, find the values of (i) $x + 1/x$ (ii) $(x - 1/x)^2$ (iii) $x^4 + 1/x^4$. [5]
33. Prove that the angle subtended by an arc of a circle at the centre is double the angle subtended by it at a point on the remaining part of the circle. [5]
(Take the case in which the centre O lies inside $\angle ACB$, as shown.)



34. ABCD is a quadrilateral field with $AB = 17$ m, $BC = 25$ m, $CD = 28$ m, $DA = 30$ m and diagonal $AC = 26$ m. Find the area of the field. Also find the cost of ploughing it at ₹ 15 per square metre. [5]



35. (a) Show that $1/(1 + \sqrt{2}) + 1/(\sqrt{2} + \sqrt{3}) + 1/(\sqrt{3} + 2) + 1/(2 + \sqrt{5}) + 1/(\sqrt{5} + \sqrt{6}) + 1/(\sqrt{6} + \sqrt{7}) + 1/(\sqrt{7} + \sqrt{8}) + 1/(\sqrt{8} + 3) = 2$. [5]
(b) If $x = (\sqrt{3} + \sqrt{2})/(\sqrt{3} - \sqrt{2})$ and $y = (\sqrt{3} - \sqrt{2})/(\sqrt{3} + \sqrt{2})$, find $x + y$ and $x^2 + y^2$.

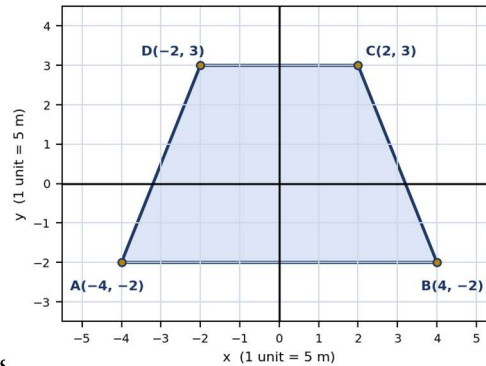
SECTION E – Case-Based Questions (4 marks each)

36. Case Study – The Sports Ground. [4]

The plan of a school sports ground is drawn on a coordinate grid, where 1 unit represents 5 m.

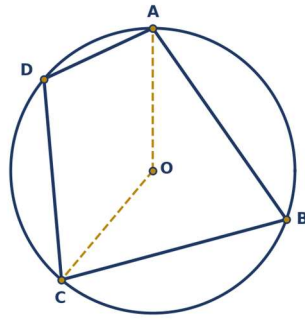
The corner flags are at

$A(-4, -2)$, $B(4, -2)$, $C(2, 3)$ and $D(-2, 3)$.



- (i) State the quadrant in which each of the points A, B, C and D lies. [1]
- (ii) Find the lengths of AB and DC in units. Name the quadrilateral ABCD and give a reason. [1]
- (iii) Find the distance between the parallel sides and the area of ABCD in square units. [1]
- (iv) Find the actual area of the ground and the cost of laying turf over it at ₹ 40 per m^2 . [1]

38. **Case Study – The Circular Park.** Four lamp posts A, B, C and D stand on the boundary of a circular park with centre O, forming a cyclic quadrilateral ABCD. It is known that $\angle ABC = 70^\circ$ and $\angle BAD = 100^\circ$. [4]



- (i) Find $\angle ADC$. [1]
- (ii) Find $\angle BCD$. [1]
- (iii) Find $\angle AOC$, the angle subtended at the centre by the arc ADC. [1]
- (iv) A student claims that a quadrilateral PQRS with $\angle P = 95^\circ$ and $\angle R = 95^\circ$ can be inscribed in a circle. Is the claim correct? Give a reason.

2. Also write down 5 activity in Maths Practical notebook.

3. Complete your portfolio.

Holiday Homework (Class-IX) – Science

1. a) Derive an expression for Kinetic energy of a body of mass 'm', moving with a velocity of 'v'.
(K.E = $\frac{1}{2} mv^2$)
b) Derive $S = ut + \frac{1}{2} at^2$
2. What are levers? Giving examples & proper diagrams, describe the 3 types of levers.
3. State the 3 laws of motion? Give 2 examples of each.
4. Write short notes on
 - a) Paper Chromatography
 - b) Crystallisation
 - c) Centrifugation
5. **PORTFOLIO WORK** : (Write this in your Science Portfolio file)
 - List the names of Scientists who got Nobel prize for Physics, Chemistry & Medicine for the year 2026.
 - Briefly write about them and their contributions to get the prize.

N.B : Write the answer of Question No.1 to 4 in your Homework copy.

Holiday Homework (Class-IX) ODIA

No.1 " ସ୍ୱାସ୍ଥ୍ୟ ହିଁ ସମୃଦ୍ଧ " ବିଷୟରେ ୧୦୦ରୁ୧୫୦ ଶବ୍ଦରେ ଲେଖ ।

No.2 "ଜଳଭୂମି " କବିତାରେ ବର୍ଣ୍ଣିତ ଭାରତର ନଦୀ , ପାହାଡ଼ , ସାଗର , ମହାସାଗର , କବି , ବୀର ପୁରୁଷ ଓ ନାରୀ ବିଷୟରେ ଲେଖ ।

No.3 ବର୍ଷାରତ୍ନରେ ପୃଥିବୀ କେମିତି ଦେଖା ଯାଏ ୧୦୦ - ୧୫୦ ଶବ୍ଦରେ ବର୍ଣ୍ଣନା କର ।

SUBJECT – SOCIAL SCIENCE

General Instructions

Complete all work neatly in your Social Science notebook only.

Use maps, diagrams, pictures and newspaper clippings wherever required.

Answers should be written in your own words.

PART A – HISTORY

Activity 1: Timeline of Indian History

Prepare different colourful timeline showing important events/periods of mentioned civilisation.

- A) Sindhu–Sarasvatī Civilisation
- B) Mesopotamian Civilisation
- C) Egyptian Civilisation
- D) The Chinese Civilisation

For each event, mention:Year/period/Event/One important feature/significance

Activity 2: Historical Investigation

Choose one historical monument/site in Sambalpur area and prepare a 2-page report.

Suggested topics:

Chauhan dynasty & Samaleswari temple.

Veer Surendra Sai's Freedom uprising.

Hirakud Dam Construction

Historical importance/Architectural features/Present condition/How it can be preserved

PART B – GEOGRAPHY

Activity 3: My Region – A Geographical Profile

Prepare a geographical feature of your locality including its atmosphere, climate, major crops , occupation and social structure of the area.

PART-C POLITICAL SCIENCE.

What is SIR, explain details of the different political movement and issued developed in last six month in concerned to SIR in India. Explain the different views of ruling, opposition and different pressure group.

PART D – ECONOMICS

Activity 5: Understanding Our Local Economy

Conduct a small survey of 5 households or workers in your locality.

Collect information about:

Main occupation/Type of work/ource of income/Education/skill required/Problems faced/Whether the work is seasonal or regular

Present the information in a table and write a conclusion of about 150 words.